Clinical Operations Workgroup
Draft Transcript
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Presentation

Judy Sparrow – Office of the National Coordinator – Executive Director
Good afternoon, everybody, and welcome to the Clinical Operations Workgroup. This is a federal advisory committee, so there will be opportunity at the end of the call for the public to make comments. Let me do a very quick roll call. Jamie Ferguson?

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
John Halamka?

John Halamka – Harvard Medical School – Chief Information Officer
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
Chris Chute?

Christopher Chute – Mayo Clinic – VC Data Gov. & Health IT Standards
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
Martin Harris? Stan Huff? David Kates? Liz Johnson? John Klimek? Wes Rishel? Nancy Orvis? Karen Trudel?

Karen Trudel – CMS – Deputy Director, Office E-Health Standards & Services
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
Chris Brancato?

Chris Brancato – Deloitte – Manager, Health Information Technology
Here.

Judy Sparrow – Office of the National Coordinator – Executive Director
Lisa Carnahan?

Lisa Carnahan – National Institute of Standards Technology – Chair
Present.

Judy Sparrow – Office of the National Coordinator – Executive Director
Don Bechtel? Bob Beckley? Did I leave anybody off? All right. Thank you. I'll turn it over to Jamie Ferguson.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Thank you, Judy. Thank you, everybody, for joining our call today. This is scheduled for two hours, and it make take that long, or it may take only one hour to pursue this discussion.

In general, we want to talk today about certain structured documents being summaries for particular purposes and their relationship to the continuity of care documents. The general flow of the meeting is I'm going to ask John Halamka to give us an introductory overview of how this became a discussion item in his daily …. Then we're going to turn to Bob Yencha, who has the slides that I hope everyone has a copy of, and the slides are being presented on the Web. So we'll run through Bob's explanation of a set of issues around the use of templates in CDA and the relationship of certain summary documents to CCD.

Then we'd like to have a workgroup discussion on next steps, what sorts of advice we might want to create in this regard. There are, I think, particular needs for a discharge summary, and so that'll be one of the things we'll want to talk about, but we may want to broaden the discussion to other important summary documents. Is everybody okay with that agenda?

W
Sounds good.

M
Sounds good.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Then, John, I'll turn it over to you to tell us how we got into this.

John Halamka – Harvard Medical School – Chief Information Officer
Certainly. Thanks very much. If we look at meaningful use, and all the transactions for meaningful use, which include provide a summary to the patient in electronic form within 48 hours, provider-to-provider communications, provider to quality public health, lab reporting, syndromic surveillance. There are packages of content that go from place-to-place.

Beth Israel Deaconess, just one hospital implementing this, said, well, gee, one aspect of sending data to our providers is to replace what we do today via fax or paper, you know, regular snail mail, or various e-mails that may be secured within our network. And what do we do? Well, let's see.

When a patient leaves an inpatient stay, we send a discharge summary, which generally begins with chief complaint, describes the hospital course, describes some salient diagnostic tests, and then it has a follow up plan, maybe dietary or work restrictions, what are the next appoints to be made, etc. All inpatient hospitals generate such documents as part of the process of care, and all community clinicians and PCPs generally want to receive such documents.

Similarly, we have an emergency department that discharges patients after an emergency department stay, and we wish to communicate with the primary caregiver for followup. And, very often, you'll have PCP specialist communications, which take place after an outpatient visit. Of course, wanting to align with federal standards, as suggested in the interim final rule, we look at the content of summary documents is to be sent via CCD or CCR. Well, it sounds like a very reasonable choice, and in fact CCD or CCR does work extraordinarily well for a lifetime medical summary of problems of meds, of allergies, of labs.

But, wait. A discharge summary has a chief complaint. Where in the CCD is the chief complaint field? There is none. Where in the CCD is there a template or a structure where one could describe dietary restrictions, followup appointments, the kinds of things that you would get in episode summary as opposed to a lifetime summary. Hence, I e-mailed smart people and said, so Bob Yencha, so Jamie Ferguson, given that we wish to replace paper and fax and e-mail with an appropriate standard for the summary of episodic care—inpatient, outpatient, and ED—how do I use the CCD, and that was the genesis of this discussion.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Thank you, John. I think then without further ado, I think we'll turn it over to Bob.

Bob Yencha – Alschuler Associates – Information & Systems Architect
Thank you, Jamie. I am still experiencing some network difficulties, so I can't see what you're presenting. Let me go ahead and introduce myself. My name is Bob Yencha. I work for Alschuler Associates. You can go to slide two with the introduction background, if you wish. And we're a small firm specializing in support of CDA, and we also are involved in the standards development themselves. The principals at the firm … Alschuler and Bob Dolan, have been involved in the development of the CDA specification, as well as numerous implementation guides, as well as the other folks on our staff are actively involved in the standards community and quite a few have clinical background.

My role is as a systems and information architect. My experience is with the HITSP project for the last several years, providing CDA expertise and technical liaison to the NHIN, IHE, and NIST for testing and understanding the standards and their application. My background has been in the – I won't age myself, but I guess I have with the extensive experience in SGML and XML architecture and systems design and implementation.

If you want to go to slide three, so as John said, the question, I'll start right off with that question was that I've been hearing for several years actually through all of these efforts is, is the CCD a universal container? Can it do all that we want? The answer is no. But that's really not bad news.

If we can go to slide four, please. The thinking here too is that what we really need, as John pointed out, are a number of documents. We need the right document for the right purpose. Between HL-7 and IHE and others, there are a large number of documents already defined that have overlapping and common content. I won't read the list here. It's pretty straightforward. There are quite a few here, but some of the ones that we see the most are continuity of care. We do have a discharge summary model out there. CDA has also been used to support secondary use such as the healthcare associated infections reporting.

We have CDA documents for personal health monitoring, etc. IHE has a number of summaries for referrals, discharge, emergency department encounters, etc. The list goes on and on. The thing here is that recognizing that while these are all document types, what they do share is a lot of common and overlapping content.

We can go to the next slide, please, slide number five. During the HITSP work, in cooperation with IHE and HL-7, even looking at the number of documents that were being called into play by the use cases that HITSP was dealing with, they identified over 47 sections and 22 entry patterns across just looking at 15, plus a few more documents. That's not even looking at all of he different models that are out there. And where there is overlap, we see the reuse of patterns and rules, so very common sections, very common kinds of chunks of information such as demographics, vital signs, payers, medications, allergies, etc. appear in a lot of these documents over and over, and they appear with the intent of having the same

semantic use, the same kind of content and rules. To that point about CCD, CCD only describes 17 sections, plus some information in the header, so it doesn't encompass and speak to all of these other types of sections. But again, I don't think that's bad news.

If you could please move to the next slide, number six, so what we recognized throughout these other documents and document types is that they have a need for specialized content. Some documents are going to require, such as surgical notes can require a surgery description, surgical operation note findings. The specimens removed, estimated blood loss, and as John mentioned, chief complaint may appear in the discharge summary. The reason that this isn't all in one master document is, as you start looking at the regulatory requirements or the reporting requirements, some sections maybe required for specific purposes and not in others. So you don't want to overburden the exchange by carrying a lot of null information and a lot of bit overhead if you can avoid that.

The other thing that comes into play, as we move into using CDA, is the concepts of level one, two, or three. As you move from one to three, you move from a certain level of encoding that tells us what this document is, maybe what these sections are to fully coded entries that are machine processable to allow for clinical decision support and other kinds of automation reuse of the content for multiple purposes.

If we can move to slide seven, please, the good news here is that while CCD is not the universal document, at the time, now we're in a timeframe here too. CCD, when it came about four or five years ago, was a start at representing sections in a very standardized way. It had a lot of benefits. We learned a lot from that.

The good news is, over the last several years, as all of these other document profiles have been developed, is we looked to CCD as the starting point to say, as we harmonize these sections of content across the different SDOs, and across the different document types, where we can borrow and rely on CCD, then that's going to be our harmonization starting point. So we start there and say, where we can use this section, we'll reuse it as is directly from CCD. If we need to tweak it a little bit for a specific purpose, then that's okay too.

Again, we're right sizing the models for the exchange requirement. HL-7 today and many of their implementation guides are reusing the CCD sections across those guides, and IHE, also in the technical framework, several, maybe two years ago, undertook the effort to go through their CDA profiles and also align their overlapping sections with CCD, so we have conformity and consistency across the different SDOs, at least those two SDOs who are developing document profiles based on CDA.

Internationally, there's been a lot of interest in CCD, so there is some pick up of this as well in the international community. CCD is actually used quite a bit. CDA is used quite a bit outside of the U.S. for national initiatives. Again, some of the flexibility of CCD there allows them to do certain things in their realm, other things not so much. The point here though, this is a work in process. As we learn and develop out these catalogs of components, this is an ongoing work.

The key to the success of doing this is something we call templated CDA, so if you can move to slide eight, please. What templated CDA allows us to do is to find patterns at the document section and at the entry level, the clinical statement level to specify required and optional structures, data elements, vocabularies, terminologies, value sets, or even specific values for specific conditions. The document template set the context for the entire document, so we can say for a specific exchange, as John said, for a summary, we want to have this information, or maybe leave it a little bit broad and optional because the encounter summaries are very broad.

But for discharge summary, we want to have specific sections appear, so we can require those. And a document level template allows us to say, in this document, section A, B, and C must appear. D is optional. And, in this document, A, B, and C are all optional, but you must have at least one of those. The section templates take that a bit further and say, for the context of the section—vital signs, results, etc.—constraints can be put on an individual section such as a history of present illness or vital signs. That can have a very constrained model, and that can be reused and invoked across any document level pattern that we come across.

Slide nine, please. The entry templates, again, stepping down to a more granular level here, entry templates are the clinical statement level patterns within the context of a section. Again, for any one of these given sections, we may say that specific entries are required. Again, the templates allow us to say, for that statement, here are the required and optional data elements. Here are the specific terminologies, whether they're static or dynamic terminologies. The binding is static or dynamic. What are the value sets in this situation? What null values may be appropriate here?

The upshot of all this is that we have, we enable interoperability of a broad range of content across document types by this ability to declare unambiguous and reusable chunks of information. A couple of examples here, for example, we have allergies and functional status, which were defined quite succinctly in CCD, and you'll find that they are reused in the HL-7 care record summary, discharge summary model. Also in IHE, you'll find that they came up with a nice model for a discharge diet section, and that's being reused by the HL-7 discharge summary as well.

The thing behind the scenes here for development in implementation is that by such templated items, if you are a coder, if you're doing systems development, if you're doing informational exchange and transformations, you know that by that template ID, no matter which document it's found in, that the code I've developed to deal with that chunk of information is reusable again across those different doc types. We have reusability not only of the exchange information itself, but we have the ability for developers and implementers to reuse their code in their processes because the semantics here are not changing of that section or that entry.

If we can move on to slide ten, please. This is just another graphical way of thinking about it. Some people are more visual than others. I'm certainly one of those. If you think of it this way, CDA is our foundation. It's given us a broad collection of tools, rules, concepts to work with.

The ASTM, HL-7, CCD was a project that then built particular sections on top of CDA, and you can see those within that orange box. We have that template that arose out of the work of bringing CCR into a CDA syntax. However, there were all these other sections: chief complaint, discharge diagnoses. These templates were being developed in IHE and in other HL-7 implementation guides, but they're all built on top of CDA.

If we can move to slide 11, please, so CDA has given us that foundation for enabling then the definition of templates. CCD is one set of collected templates for a specific purpose. The beauty here is then that by following the rules of CCD, I can create other CCD-based documents that may have the full range of sections declared by CCD, or only a subset because CCD allows me to do so. However, I can also create other CDA-based documents that are compatible, at least in those sections where there's overlap, with CCD, still include other sections that are outside of CCD, so where we have this overlap, I've got reusability of the semantics of the information, and I've got reusability of my development and implementation processes and technologies.

If we can move to slide 12, please, so we've been talking here mostly focused on, as John said, setting the stage for this conversation was coming in here was summaries, and we have different kinds of summaries, and I'm highlighting two here, the continuity of care CCD and the care record summary. Some of the things we've learned and, as you see, as we've evolved in the use of templated CDA, and a better understanding of how to reuse and structure implementation guides for maximum reuse. So continuity of care is a fixed doc type.

It says this will always be this code at the doc type level. This is the only document type code allowed for if you want to be conformant to the CCD implementation guide, and it will be always called a summarization of episode note. You may be able to put other things in there, but you can't call it and still be compliant to CCD. You can't call it a surgical note or treat it as if it's some other type of document.

If you look at the care record summary release two when that was revised to focus on being a discharge summary, the movement here too in coding is for what we call a little more post coordination that allows for creating a more specific by bringing together several pieces of information. In the care, in the discharge summary, because, as we note, settings are important to professional level of who created the document are important. In the care record summary implementation guide, we have doc types. We have a set of doc types that are allowed with a default recommendation, but those doc types allow us to say this is a generic doc type. It's still a discharge summarization note, but you can, as the creator, post coordinate that by declaring which setting this was created in and a professional level associated with that creation of the document.

We also, in that guide, allow for several other codes that you can still declare this as a discharge summarization note, but now you can post coordinate the setting, but the professional level is fixed to physician, and this is fixed by the LOINC code itself, the 11490. As that short list shows, there's a set of options here that if you really want to be specific and pick one of those, you can, but the recommendation is to stay a little bit more generic on the document level and post coordinate through these other values. So that gives you a little bit more room to use the discharge summary profile in a number of locations and still all be conformant to the same internal content model of that implementation guide.

If we can move to slide 13, please, so at the top where this shows up in the documents, there is a code system every CDA document has to declare at the doc type level what it's code is, what it's doc type code is. Between a discharge summary and a CCD, we're talking a few bytes here and some text. But this is, again, the CRS, that value of 11842-5, that can change to several, and they will still all be discharge summarizations and compliant to a discharge summary. In CCD, you're limited to just the 34133-9, and that's all that the CCD will ever be, so there are no flavors. There are no further distinctions of a CCD.

If we can move to slide 14, please, so in the conversation we'd been having leading up to this presentation, there were four document types that, in an e-mail John had copied me on talking about, you know, these are things we'd like to do. This is purely Bob Yencha's thinking about the problem and looking at what's possible here. To say for those kinds of documents John was talking about in the e-mail chain, and inpatient discharge summary could be served by the CRS discharge summary using the generic code and post coordination for the setting. Emergency department discharge could also use the same implementation guide, just using different codes for the post coordination of the setting. An ambulatory visit summary, certainly continuity of care is a good model for that.

The lifetime health and record summary, while CCD can fit, conceptually is a good fit for that, in terms of all the kinds of other kinds of sections you might want, if you go think back to that initial slide or earlier slide where we identified 40-some-odd sections and 22-odd clinical level statements only across a small set of documents, in the lifetime health record summary, certainly CCD may be a good start. But we

would probably, my recommendation would be to really look at the requirements for a lifetime health record summary, building on top of CCD, and really look to establish a new document model and document type for a lifetime health record summary.

If we can move on to slide 15, so one of the things here is that all of this, you know, really points out to, we've been building a lot of building blocks here, and the standards do allow for some wiggle room, but I think what we have to be careful with when we use that wiggle room, what are we actually doing. So for example, the CDA standard itself realizes that there are times when, because we're working from a common information model, the rim, that there are other things that may have to be expressed that are not easily done through the rim yet or the work is in process, but there's a need to communicate today.

There is a way to extend locally, but that's the keyword. Those extensions are local, and so both CDA and CCD allow this kind of extension when you can create valid, you know, it must be CDA valid extensions to the document. However, when you do that, you're still outside the realm of the CCD implementation guide and its rules, so extensions are not necessarily going to be understood by anyone else, nor is there any requirement for anyone to say, if I suppose CCD exchange, that does not necessarily mean I support all of your local extensions that you've put in there. That's strictly by local convention between two trading partners. As a national strategy or broad strategy, extensions don't really work that well. They break down after while because you really are dealing with something that's outside of a common set of rules we can all point to and say we all conform to that model.

This idea that we may want classing of things, if there is an idea, there is that concept of classing, we want to say in our searches and in our queries for documents to say find me all the summary documents about Bob Yencha. I don't want all of these other specific types. But I don't want to have to sit there and think of a laundry list of summary type codes. I can class in my registries and repositories that all of these documents, a CCD, a discharge summary, and emergency department summary, all types of summaries that I want to have returned for my query. So there is the idea of classing, but this idea of classing happens in the repository, in the metadata, in the exchange wrappers.

If we overload some of these models, what happens is we lose the kind of context that we really need. If we indexed, you know, an analogy I use, if we indexed all the books in the library of ancient history, then you're never going to find a science book on physics. So if we say everything is a CCD, we're not going to be able to say, get me that surgical note. Get me that procedure note of that neonatal note.

Slide 16, please. These are just some notes, some background here. When HITSP was looking at this problem, the consensus, and this was in 2007 when we made the original decision, Jamie may recall this. He was the chair of the working group, and I was supporting him at the time. We struggled hard. Are we going to – you know, we needed to understand that we're choosing a foundation here, and so the consensus of the HITSP group at the time was, CDA provides that foundation on which we can grow, so again, it's a broad horizontal platform on which we can build vertical applications in the advent of templated CDA and the notion of templates has really jumpstarted the ability to start building reusable components of information and building out models.

The other point I would make about CCD, it was a very specific project unlike other document type implementation guide profile development that start more Greenfield. It was a very specific project to take the model of the continuity of care record from ASTM and represent that in the HL-7 CDA syntax. So in that sense, the CCD is limited to the concepts and the uses as identified by CCR because one of the attempts there was to say there can be interoperability between or some transformation, if you will, between CCD and CCR. If CCD tries to use too much outside of that, we break that ability to say we can easily move between those two limited sets.

Again, the last point is the use of all of these templates that allow us to say we can create new content, we can create new sections, new clinical entries, new documents that are compatible with CCD where they overlap and compatible with other documents where those templates may come from and overlap. So we can reuse those templates and, as well as, following the extension framework that's enabled by CDA and HITSP had begun to describe in its C83 document is the ability to say we're now at the point where we can begin to describe and indicate that a document is conformant in all of its sections to the different templated objects, even though we may not have a template ID that says this document I've created in terms of its requirements for the full model of the document have been validated or have been approved by some group. But at least in that exchange, we know that if we find these sections, that we can recognize them, that we can understand their semantics, we can understand what their intent is and reuse our code to deal with those sections.

Slide 17, that's basically the gist of my presentation today, so I will turn it back to Jamie and your committee to ask me any questions or open it up for discussion.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Great. Bob, thank you very much for taking us through that. I think that was a good presentation on the basic concepts of templated CDAs, and I think this explains pretty effectively how to build upon the standards of CCR and CCD with extensions in a way that can make sense across a variety of document types. But I also think that I've heard some questions or comments with regard to the CCD. Bob, just pretty much as you alluded to that there are folks who feel that when they need a discharge summary, they'll use the CCD and still call it a CCD, but essentially add on the sections that they want or perhaps just put the additional discharge instructions in free text, as an example. What's the matter with that approach in the short-term?

Bob Yencha – Alschuler Associates – Information & Systems Architect
I think, again, though the extensions tend to be localized in a convention between two trading partners, and I'm wearing a very strict standard interpretation hat here. By the definition of the standards and the rules, those localizations can be ignored by anyone you send it to. So you say, so Jamie, say you and I are trading partners here. You can send me that thinking you're sending me a discharge summary, and it may be there in the document, but I'm saying I'm very strict on my conformance to CCD.

CCD doesn't talk about a discharge summary, that section, so I am free to ignore it and tell you, Jamie, I didn't get the discharge summary I was expecting. I made a query for a discharge summary. You, internally in your system, decided to send me that. But I don't recognize that as a discharge summary because I'm looking at the doc types in order to know what is the document I received because my understanding of the manifest, of the content, of that document, is driven by the implementation guide.

While you can do that, you just opened yourself up to having to negotiate that localization with every partner that you want to exchange with, and the reality of these kinds of records and documents is they're created quickly and often and live a very, very long time, so you don't know who is going to request that document tomorrow or next week or a month from now or a year from now. And so these kinds of behind the door kind of handshaking things are very difficult to maintain over time and over an unknown group of partners. So I'll just stop there, and hopefully that answered your question.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Great. Let me take the opposite position, and then I'll ask for a workgroup discussion. The opposite position would be perhaps something that the workgroup may want to bring up for discussion with the standards committee would be the idea that there should be some, well, I guess, whatever number

required of these templates, as Bob was describing them, for CDA templates, which in addition to the CCD templates, could be considered through the standards and interoperability process for adoption within the scope of the committee. How do folks feel about this whole topic and about that idea in particular?

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
Jamie, this is Nancy Orvis, DoD. I have very strong opinions. I strongly endorse that. I am already saying a continuing, a patient care summary does not solve the majority of my information exchange needs as a healthcare delivery organization. For four years, I've had an approved implementation guide, if somebody would want a DoD military health system discharge summary. I would like to implement that really because the patient care summary, as Bob made a really good case, does not meet the criteria for discharge summary.

Again, we've had, many of us for the last six or seven years, have had people on a clinical, additional clinical documents under the HIPAA have a separate committee at HL-7 have had contractors and people sitting there saying are we going to approve the clinical documents for ambulance care summaries, for additional clinical information? We need to address those issues on whether those six or seven CDAs for particular information exchanges are overcome by events or need to be approved. That's a whole NPRM dealing with additional clinical documents for health insurance verification purposes.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Nancy, let me just counter. Let me first agree, but then also counter part of what you said that instead of a whole CDA, I think one of the ideas that Bob proposed was that we might consider only those additional templated sections that are needed for that new purpose.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
I would agree, and I would base it on the C80. I think if we go with the constraints of how the CCD has been put in a C32, we will go into a box canyon that we will not be able to get out of technologically. There are a lot of issues on how that was constructed in there, and it's probably a little bit too constraining for how we want to build these other constructs to make sure we get all the clinical information that we need.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Okay.

Chris Brancato – Deloitte – Manager, Health Information Technology
Yes. This is Chris. I just wanted to add that I think the notion of having a templated CDA is enormously sensible, so thank you for that presentation. I think many of us recognize that CCD was not intended to achieve the kind of use cases that we are describing and that Nancy is describing and others.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
Right.

Chris Brancato – Deloitte – Manager, Health Information Technology
But now the question…. Go ahead.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
I mean, I just wanted to be really clear. Healthcare institutions who are exchanging records are not, there was only one use case, a person who is transferring from one doctor to another, and that's really what the

CCD was intended to do. It was based on the British Health System's issue of transferring to a new GP. What do you need to bring with you?

Chris Brancato – Deloitte – Manager, Health Information Technology
Actually, it's the Massachusetts Medical Society, but anyhow, the whole notion of making additional CDA templates, which I think is the upshot of the explanation, and presumably assigning document types to them begs the question of who would be chartered to do that. We no longer have a HITSP process. I guess we're in between on the RFAs for a new standards infrastructure nationally. HL-7 obviously has come up with proposals along this line. But it does beg the obvious question logistically of who would be designated to propose such variations on the CDA.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Chris, let me comment that, in my view, it's probably outside the scope of the workgroup or of the standards committee to say who should do that, but I think we can describe what is needed to be done and what we think should be done, not necessarily by whom. So for example, if we think that there should be one and only one new templated section of CDA that should become an adopted standard for each of the list of specified purposes in this presentation and others, and that there should be a federal process that should manage that selection and adoption process in one and only one way, and that it should be open and transparency—I'm just making this up—put that that would be a recommendation, I think, that would be within our scope to say that it should be done by someone, in my view would be out of scope for us, although anybody ….

Bob Yencha – Alschuler Associates – Information & Systems Architect
Forgive me. I didn't mean to say that we should propose that. I was simply pointing out that, at present, it's not obvious. But I agree with your scope limitations….

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Yes, but I do think it might be useful for us to help. At least my view is it might be useful for us to help guide whatever the process evolves to be in terms of some of the desired outcomes for extending and reusing the sections of the CCD, which by extension means that for those parts that overlap, we're also providing essentially some, through transformation, some extensibility to the CCR to the extent that that's being used as well.

John Halamka – Harvard Medical School – Chief Information Officer
Let me just ask a question of Bob Yencha. I have NEHEN, the New England Healthcare Exchange Network, that has built CCDs and is shipping them all over for various purposes. When I told them oh, my God, there may be a change. You're going to hae to do something else. They said, oh, that's sounds horrific. If what you are suggesting in this proposal is basically you change a LOINC code in the header, and take everything you've already done, use it in tact, but add additional CDA templates for chief complaints and other things that might be of use, then suddenly this builds upon, not replaces previous work.

Bob Yencha – Alschuler Associates – Information & Systems Architect
That's absolutely correct, John. In slide 13, I'm saying the differences here at the top level is a few bytes, and then the sections themselves now have the proper context and the proper understanding of what you're going to do with that package. That's why I said several times, we talk about the reuse of the content, but I wanted to stress my background as a developer is it's a reuse of your code and your development processes and the technology you're using to move these around, so you suddenly have a lot more flexibility to say at the top level when this comes through, I know this is a discharge summary.

Treat it this way. I know this is a continuity of care; treat it that way. I don't have to tear the document apart and try to understand all of its pieces and deduce what did you just send me.

John Halamka – Harvard Medical School – Chief Information Officer
In fact, what you're saying is the CCD implementation guide that we have, say in Massachusetts, which has demographics, payer, family history, social history, vital signs, medications, problems, and allergies doesn't change. What happens, in fact, is we simply say, oh, if you would like to provide additional specificity that this is an inpatient discharge summary, change the LOINC code at the header, and add a CDA template for chief complaint, discharge diagnosis, mode of transport, surgical finding, and discharge diet, and there you go.

Bob Yencha – Alschuler Associates – Information & Systems Architect
Yes, I don't want to be … about it because I would say one would have to look at the discharge summary guide and see what other requirements are made there, but to say that if you've got the CCD, and you're adding a couple of sections to make it a discharge summary, I think you've probably got 80% to 90% of the work already under your belt, and it's incremental. The effort here is incremental, not a complete do over. I think, to your original question, it's an incremental step to be taken, not an oh, my God. I have to start all over from scratch.

John Halamka – Harvard Medical School – Chief Information Officer
Here is from Bob Beckley's standpoint who is coding some of this. He says, you know, I spent all day trying to figure out what CCD fields to jam chief complaint into, and guess what. When we're done, it'll work done in Massachusetts. In a sense, what this proposal is, folks, let's quit trying to put a square peg in a round hole. Let's just agree that what we've done in the past is great and continues on for its particular purpose. But for additional purposes, don't reinvent a standard yourself at a state level. Just agree that we are going to add CDA templates or whatever new and novel … exchanges we need in the future.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
John and Bob, can I ask a question? This is Nancy again. Does this fit? We've had various people who are working with HITSP who made all of those information domains, which are part of the C80 now, and so does that allow us? That's where engineering wise, I think we want to go. I've had some key people discussing this with DoD, VA, engineering, and documenters and saying we want. Basically you want to create a template for each one of those information domains in the C80. Is that kind of what we would be suggesting and so that these would be all the building blocks that we want to put together?

Bob Yencha – Alschuler Associates – Information & Systems Architect
Yes. If I could, Nancy, I think you're referring to C83 where the CDA modules are described.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
I'm sorry. Yes.

Bob Yencha – Alschuler Associates – Information & Systems Architect
Yes. C80 is the vocabulary document from HITSP that explains all the terminology and vocabulary ….

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
Right, and then there are the groupings of them in these clinical domain groups, and I know. I just was looking at that. I just misspoke.

Bob Yencha – Alschuler Associates – Information & Systems Architect

Yes. Let me say that was the concept that we were just on the doorstep of beginning to articulate in the C83 was to say here are all of the modules, so all of those 47 whatever content modules are described in the C83. What you have there through HITSP is at least across all of those modules down to the data element level. There was effort put in.

Again, with folks from the DoD, Steve Huffnagel was involved in this process, as well as many others, to say that these sections, these templated items you find in C83, you can use them in. They are reused in the C32, the C28, the C37, etc. So you'll notice, if you go to the last set of HITSP releases, we took all the details out of those C32 components and said, all C32 now says is here's the manifest of sections you're going to pull out of C83 and use. And C28 does the same thing.

It says, you go to C83, and you're going to pull out this set of sections. Again, you have that reusability. So for new document types, one would simply look at C83 and say, are all the components I need there? Yes, I can pick them up and is there a LOINC code for the type of document I'm trying to describe? Quite possibly, yes, there are several hundred document type codes already available, so you can find one that meets your needs.

C83 goes further to explain how you can put a template idea at the top of a document that says, that indicates to the receiver that the sections that you find within this document, while the document itself doesn't have a set of rules about what's required for the content, there is no implementation guide out there. This indicates that the creator of this document attempted to create all of the sections that were appropriately identified by the template IDs on those sections, conforming to this common model. Further, that if you even use data elements in a section that doesn't have a template ID or in a clinical statement that those data elements are trying to conform to the constraints, again for interoperability in the U.S. realm, as specified in the C154 document.

I think I answered your question or I hope I answered your question to say yes; a lot of those pieces are there. I think of it as you've got a box of Legos, and you can start snapping them together in the configurations that you require knowing that the different Legos that you pick out are going to work together.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Thank you. I have a question actually for Lisa Carnahan. Lisa, I hope you're still on. My question is if we were to make recommendations that, for example, would move the standards and interoperability framework would recommend that they define and refine the use of these standardized templates as mechanisms to assemble documents from the reusable CDA templates, would that have either an adverse or a beneficial impact on the testing plans that you folks have?

Lisa Carnahan – National Institute of Standards Technology – Chair
Actually, it's in line with the testing plans that we have because we're already actively working on updating to handle, to have all the sections for C83, and actually the test development, the ability to provide tools that would help vendors in their development and other folks understand would mirror what Bob was talking about how – I think it would be simplicity in coming up with and defining new documents. It would also be simplicity on our end on being able to develop the measurement criteria. I use criterion differently than in the meaningful use criteria, but the measurement method, the validation, so it would actually be very easy for us, and it's not a departure from where we're already going.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Great. Thank you. I also wanted to go back. Nancy, you mentioned something about the attachments group in HL-7.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
Yes.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
I wanted to touch back on that because I know that the previous work of that group had been to create essentially entire CDAs for a number of individual purposes. Ambulance, I think the ED one was actually deprocated, but there are a number of different particular CDA documents that are complete CDAs. But I think what we're talking about here is moving to the possibility of making recommendations that would move the framework more towards the use of these templated sections so that you would essentially assemble the particular complete CDA that you needed out of a list of approved or adopted section templates. Can you imagine what the impact of that would be on the work in – I mean, would there be an adverse or beneficial impact there in terms of the approach to attachments from your perspective?

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
I think it would be beneficial because that group has been sitting for six years not being able to get off the dime, and we're spending, many of us in the nation are spending. There's a cost of not doing anything, and it's becoming bigger and bigger every day, so if it's a point where we say it's time to modernize or take those ones that have been done, and I think, Lisa, we might figure out how to do some recommendations because it certainly would need to be a recommendation on how to address that rule on clinical attachments and perhaps give it a modern alternative, which would be these modules.

Lisa Carnahan – National Institute of Standards Technology – Chair
Right.

Nancy Orvis – U.S. Department of Defense (Health Affairs) – Chief
I think that should be addressed in the next year because I am mandated as a healthcare provider right now to participate in dual standards organizations, the DMSO rule, and you look at the participants on those committees, and it's a large cost to have all your constituencies represented on that awaiting a final rule that is not happening. And where they can't move forward on the work because they're kind of stuck in limbo, so I think this would be certainly we should address the clinical attachments and the way forward on clinical attachments so that that can be resolved in some form or fashion.

Chris Brancato – Deloitte – Manager, Health Information Technology
This is Chris. I guess I have a question for Bob. Going back to your metaphor of the Lego pieces, which I find very appealing actually, I'm a little confused as to what impact that would have on the identifier for the document type if we assemble from a number of different components. Are you anticipating that we would enumerate all the common editorials to create new document type codes, or would we embed and concatenate those identifiers for the components within adopting a type?

Bob Yencha – Alschuler Associates – Information & Systems Architect
I believe the latter. I'm not proposing that any one sit try to a priori identify all the combinations. I think, and I would think … I have two perspectives on this. I would say one from a national initiative level, the idea that the particular types of exchanges that we want to, you know, that we pick as national priorities, certainly those document types, I would say there would be a process there to say if there's a particular type that needs to be exchanged, discharge summary, we look to the organizations that have been building these implementation guides first and say, you have analyzed. Have you analyzed that document type? There's a LOINC code out there. Have you put together the model that says a discharge summary must have this, may have that, should not have this? And start with that.

Where there's a gap there, I think one of the things, to the point you raised earlier, Chris, about who is going to do this. Where is that going to happen? I think one of the benefits, beneficial effects HITSP had on the industry was it did bring together IHE and HL-7, at least for the U.S. realm, to coordinate and do more coordination on the development of those document types and templates such that you see a free reference back and forth between the two, and I think that there's a certain inertia here that would be overcome by those, you know, that those organizations would, as they were doing the end of HITSP where they're anticipating, let's focus our priorities on this because HITSP needed it or HITSP was looking at it.

Now if those directions are coming from this committee or from the HIT Standards Committee that they would look to those as the priorities of which ones they would model next. So that we may have some period of time for any of these document models that is a little bit ad hoc while we test them out. But I think that it would really be, you know, an organic, self-sustaining function that the different pieces of the different wheels here would start clicking together a little bit more to work together.

John Halamka – Harvard Medical School – Chief Information Officer
I have to jump off to this other call, but it seems to me like across the board on this call, everyone agrees, this seems like a very reasonable idea, and the way we would pitch this is it doesn't replace previous work. It builds on previous work. The impact on the implementers is actually not huge. It's consistent with what NIST is doing anyway. It's really evolutionary, not revolutionary. And so, to the process step, we're going to hear at the HIT Standards Committee on next Wednesday where we are with the RFAs, where we are with the NIEM approach, where we are with a HITSP replacement, so to speak. And I think what we've heard is this recommendation coming out of this workgroup that for the typical discharge documents we need in healthcare, an evolution of CCD to now include templated CDA and to insure this is put through whatever standards process will succeed, HITSP seems like a reasonable, go forward plan.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Yes. I think that's just right, John. I do think this is going to take more workgroup discussion, so while I would be happy, just before you drop off, I would be happy to introduce this discussion to the standards committee next week. I think then we're going to have to have additional workgroup discussions to refine the idea before we'd be ready to make any recommendations.

John Halamka – Harvard Medical School – Chief Information Officer
Sounds perfect. I would go find out about Indian Health Service. Jamie, thank you so much. Please continue with further discussion.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Great. Thank you. Thanks, everybody, for staying with us here. What other considerations are there in terms of the potential for making this kind of recommendation that we might, you know, sort of just categories of things we might want or have to consider? For example, what would be the relationship of the requirements for the templates that we would recommend to the requirements for quality measured reporting in meaningful use? And so in terms of specifying the value sets and, I guess, specifically, specifying value sets. Is there any thinking that folks have on the call about how we would tie those pieces to this template development and selection process?

W
Say that again?

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy

What I'm saying is that the information that's exchanged would essentially then become part of the record at the other institution that could be then used for quality measures, and we'd want to make sure it's the right information and the right value sets. There would have to be some, at least as I'm proposing, that there would have to be then some coordination.

W
Let me ask you that because legally in the paper record, my experience has always been, when you get a document from an outside institution, unless it's an authorized result provider, it goes into the other either patient history section, or it goes into external information.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Yes, it does, but then individual clinicians may feel that it's of sufficient validity and relevance to make it a part of their record.

W
They can use it to do their own assessment and their own determinations and have further things from that. But I think that's one of the things I want to figure out because it's usually very clear in a paper record. You've got … external test or external thing, and whether the organization that I am working for at that time is standing behind that and saying I take these as valid results to make my own internal care plans.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Right.

W
I don't know if there are extra things that have to be done for that. I mean, do you label these documents to say I attest that these are now a part of my care plan?

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
No. I get the gist of the question. Maybe we can make recommendations without answering that. Maybe we can make recommendations that would enable a variety of results of that discussion. I'm not sure.

W
Because I think that would be, you know, good quality of care, and are you meeting the standards of care? Yes. If you say that you've dealt with these, and these are all authorized other providers, you can incorporate those assessments and observations in your own complete assessment and diagnosis and treatment plan. But I guess you're saying, you want to know if we want recommendations on the level of computability that we should have as minimum standards from these…?

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Let's look at the hospital readmissions where I think the overall plan has been discussed in both the policy and standards committees previously is that in stage one of meaningful use, readmissions would be per facility. Stage two generally would be per hospital network or affiliated hospitals, if you will, that would be defined somehow in stage three would be on a community-wide basis requiring interoperability. For stage three, in terms of hospital readmissions, there would have to be some level of computability and semantic consistency of the information that's exchanged in order for each institution to be able to report that figure. Maybe we can tackle this question, the relationship to value sets, without going into the legal medical record questions.

Bob Yencha – Alschuler Associates – Information & Systems Architect

I think the answer to your question, Jamie, is yes. You know my position on this. I'd been consistent for the past 20 years. It's meaningless to have syntax without content if you truly want interoperability. Yet this begs a variation of the question that I know is beyond our scope. Who do we see about establishing these kinds of value sets so that we combine them to extended CDA template messages? HL-7 has been grappling with this throughout its entire existence. HITSP, I think, made progress on it, but I don't think got as far as many of us would have liked to have seen. Yet, you're asking and underscoring the fact that if we were to expand the portfolio, if you will, of CDA templates to explicitly include document types that are needed and required beyond CCD, then we'll still confront the problem of the value set population question. That's been a thorn since forever.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Right. I guess my thinking is that it could potentially be in scope for recommendations that this workgroup would consider not to specify a solution necessarily, but to outline a scope of the problem that could reasonably be expected to be solved within the scope of meaningful use. In other words, identify, and I use readmission rates, which might require the use of discharge summaries that were the same across the community, and so that might be a starting point, and there may be other specific measures that we may want to point to as a starting point for this kind of coordination.

Bob Yencha – Alschuler Associates – Information & Systems Architect
You have my vote.

W
Yes, Jamie. This is my vote on saying that we need to move forward on that. In fact, we are grappling. As you speak, we are grappling with many of these issues internally as a provider and how we're trying to set ourselves up, so yes, we need to move forward on this.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Are there any folks on the call who have other opinions or think this is, in the first place, not something that we should pursue in further meetings of the workgroup?

W
Jamie, I would ask, do we have any influence to inquire to ONC on the progress of their next stage, HITSP, or their standards?

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Well, I mean, I think in the standards committee meeting next week, we'll have that opportunity.

W
Because I truly think this is the … these things that we're talking about right now are high priority candidates for the next specification….

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
I think that's probably right. Yes. So I think, with the permission of the workgroup, what I will do is I will create just one or two very simple slides for next week that would describe the discussion that we had today just to inform the standards committee, and I'm not sure. I guess we need their permission of the full committee to proceed in this direction. But in general, I think this will be an update on work in progress in the workgroup that we would expect to come up with recommendations following further workgroup meetings after next week.

W

Good. I have one other question though. Is the workings of this group perhaps hindered or not going to be as expedient without this other contract for standards and specifications? In some respects, I think it is.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
What I would say is, let's see how far we can get, and then we can come back. In fact, we ought to engage Doug Fridsma and others in ONC in our further discussions on this.

W
Okay. Because I think we all, just for our … we will engage on that because, as you say, the factories have to keep making new standards and new specs. And if you cut out the new stuff, you don't have anything to lay new tracks.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Right, exactly, but I think we're talking about a general direction that's consistent with what I know about the spec factory work to date, and so I don't think there are any conflicts there.

W
I don't think there are either. I said my staff that's been working in HITSP and the standards committees I think would endorse that too.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Yes. Let me ask Karen Trudel, if you're still on. I haven't heard anything from you, and I'm just wondering if there's anything in this discussion that gives you heartburn or that you think is particularly beneficial. We may have lost Karen. Are there other? I think we've reached a good point in this discussion. I'm not sure how much further we should take this today. Are there folks who have other parts of this topic that they want to bring up or other points they want to make in regard to what we've discussed here today? Then I think, Judy, we're ready for any public comments that there are.

Judy Sparrow – Office of the National Coordinator – Executive Director
That's great. Operator, can you check and see if there's any public comment? Jamie, I think when you do your slides up, we'll send them out obviously ahead of time and some of the committee members that weren't able to be on the call will have sort of a heads up on what you discuss today.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Right. Exactly.

Judy Sparrow – Office of the National Coordinator – Executive Director
Yes.

Operator
We do not have any public comments.

Judy Sparrow – Office of the National Coordinator – Executive Director
Thank you, operator. Thank you, Jamie and everybody.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
That's it for this call then.

Judy Sparrow – Office of the National Coordinator – Executive Director

Great. Talk to you later.

W
Good meeting.

Jamie Ferguson – Kaiser Permanente – Executive Director HIT Strategy & Policy
Thank you.

Bob Yencha – Alschuler Associates – Information & Systems Architect
Thank you.

W
Thank you.

M
Bye.

Public Comment Received During the Meeting

1. Can we change that question to "Is there a CDA DocType or Template that is relevant to optometry?"

2. Is there a Discharge Summary DocType for Optometrists?